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TITLE : METHOD FOR PRODUCING TEREPHTHALIC ACID

ABSTRACT : PROBLEM TO BE SOLVED: To provide a industrially advantageous method for producing terephthalic acid in which an improvement is made so as to carry out recovery and effective utilization of at least acetic acid and methyl acetate by using one unit of rectifying column.

SOLUTION: A mixture produced from a production process of the terephthalic acid and comprising at least acetic acid solvent and water and methyl acetate formed as a by-product in an oxidizing reaction is treated in a rectifying step. In the process, an acetic acid-dehydrating rectifying column equipped with  $\geq 20$  plates is used and the mixture as a rectifying raw material is fed to a feed plate of the acetic acid- dehydrating rectifying column to recover a bottom product consisting essentially of the acetic acid from the column bottom. A mixture of the water with methyl acetate is recovered as a distilled vapor from the column top, condensed with a condenser and recovered in a reflux tank. The substantially whole amount of the methyl acetate is recovered as an uncondensed gas from the vapor-phase part of the reflux tank by entraining the methyl acetate with an insert gas dissolved in the rectifying raw material. The whole amount of the condensate recovered in the reflux tank is refluxed to the acetic acid-dehydrating rectifying column to recover the water as a side-cut liquid.

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